

# Invasive Plants & Weeds

The City of West Linn provides this information to assist you with the identification and/or removal of invasive plants or weeds. We hope that the following information and web links below will be of value to our community.

## The Problem With Invasive Plants

Invasive plants have an impact on water quality, biodiversity, fish and wildlife habitat, tree cover, fire risk and costs.

### Water Quality

When invasive plants like ivy or clematis dominate the groundcover, there is very little root structure to bind the soils. That's why large areas dominated by invasive plants are more likely to erode during flood events than areas with a diverse understory of trees and shrubs, which provide more root structure diversity.

Native plant roots extend deep into the soil, and many species have wide, branching fibrous root structures that bind the soils and reduce erosion. Erosion releases sediment to streams, increases stream turbidity, and impairs water quality.

Invasive plants provide less streamside cover and shade, which increases stream temperatures. Invasive plants, such as Japanese knotweed or Himalayan blackberry, form monocultures (areas entirely dominated by one species) next to streams, which prevent tree establishment.

### Biodiversity

Habitat loss and invasive plants are the leading cause of native biodiversity loss. Invasive plant species spread quickly and can displace native plants, prevent native plant growth, and create monocultures. A healthy plant community has a variety of herbs, shrubs, and trees. Invasive plants cause biological pollution by reducing plant species diversity. Changes in plant community diversity reduce the quality and quantity of fish and wildlife habitat.

### Fish and Wildlife Habitat

Invasive plants are a leading cause of declines in native plant and animal numbers, and are a factor in Endangered Species Act listings. Invasive plants outcompete and displace native plants that many native wildlife species depend on for food and cover. For example, the Fender's blue butterfly depends on Kincaid's lupine as a host plant for the butterfly larvae. Fender's blue butterfly is listed as endangered and Kincaid's lupine is listed as threatened under the Endangered Species Act due to habitat loss, changes in land use, and habitat encroachment by invasive species such as Himalayan blackberry and tall oatgrass.

A variety of food and cover fosters more animal species and larger populations. In addition to displacing native species, invasive plant monocultures and simplified habitat often provide habitat for non-native wildlife. Non-native song sparrows, for example, often nest in Himalayan blackberry patches. Non-native wildlife species can also displace similar native species because of overlap in habitat needs.

### Tree Cover

Invasive plants can reduce the amount of tree cover by preventing trees from becoming established, causing them to fall down prematurely, or reducing their growth rate. A Harvard University study showed that garlic mustard

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reduces soil fungi and inhibits the establishment of tree seedlings.

Dense cover by Himalayan blackberry can prevent sunlight from reaching seedlings or saplings. Dense ivy or clematis in the tree canopy can weight down trees making them more susceptible to blow downs and decreasing their growth rates by shading the leaves.

### Fire

Monocultures of invasive plants create fuel for wildfires. Ivy or clematis vines climb trees and can become a conduit for fire to reach the tree canopy, where it is more difficult to control and more likely to threaten nearby structures.

Invasive species monocultures can increase the frequency of wildfires. Cheatgrass, for example, is an annual grass that grows in early spring. By summer, cheatgrass is dry and ecosystems dominated by cheatgrass are more likely to catch fire.

### Costs

Invasive plants aren't just a West Linn problem. There are regional, state and federal efforts to combat invasive vegetation. The Oregon Invasive Species Council estimates that invasive plants cost the U.S. economy \$120 billion annually in lost crop and livestock production, control efforts, property value damage, and reduced export potential.

These costs are passed on to consumers through higher prices for agricultural products. For example, money a farmer spends for star thistle control in pastures is reflected in the price of your steak. The Oregon Department of Agriculture estimates that 21 invasive plant species in Oregon reduce personal income by \$83 million per year.

Increasing efforts to prevent and control invasions is the most cost effective and ecologically successful approach. The U.S. Congress Office of Technology Assessment reports that a dollar spent on early weed control prevents \$17 spent in future control efforts. If early intervention is not implemented and a species becomes widespread, eradication may not be feasible so the damages are permanent and money is still spent to control the future spread and contain the population.

### Web Links

[State of Oregon - Noxious Weed List](#)[State of Oregon - Plants invasive to Wetlands](#)[City of Portland - Nuisance Plant List](#)[Oregon Department of Agriculture](#)[The Nature Conservancy](#)

- [Parks and Recreation](#)

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